JUN 0 1 2004 W

TRANSMITTAL

McKinney & Stringer, P.C.

May 24, 2004

101 North Robinson, Suite 1300 Oklahoma City, Oklahoma 73102

Individual

Signature

Date

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031
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Application Number

09/481,351

| FORM | | Filing Date Januar | | uary 12, 2000 | | | |
|--|----------|--|----------------|---------------|--|--|--|
| | * | First Named Inventor | David R. Payne | | | | |
| (to be used for all correspondence after initial filing) | | Art Unit | 3671 | | | | |
| | | Examiner Name Raymor | | nd Addie | | | |
| Total Number of Pages in This Submission | 15 | Attorney Docket Number | 082380-00339 | | | | |
| | EN | CLOSURES (Check all tha | | | | | |
| | <u> </u> | CLOSURES (Check all tha | it appiy) | | | | |
| Fee Transmittal Form | Dr | rawing(s) | | | After Allowance Communication To a Technological Center (TC) | | |
| Fee Attached | Lie | Licensing-related Papers | | | Appeal Communication to Board of Appeals and Interferences | | |
| Amendment/Reply | D Pe | Petition | | | Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) | | |
| After Final | | Petition to Convert a Provisional Application | | | Proprietary Information | | |
| Affidavits/declaration(s) | | ower of Attorney, Revocation hange of Correspondence Addr | | Status Letter | | | |
| Extension of Time Request | □ те | erminal Disclaimer | | V | Other Enclosure(s) (please Identify below) | | |
| Express Abandonment Request | Re | Request for Refund | | | Pre-addressed postcard | | |
| Information Disclosure Statement | Cr | D, Number of CD(s) | | | | | |
| Certified Copy of Priority Document(s) | Remarks | s | | | RECEIVED | | |
| Response to Missing Parts/ | 1 | | | | 13 (1) 0 - 0004 | | |
| Incomplete Application | ĺ | | | | JUN 0 8 2004 | | |
| Response to Missing Parts under 37 CFR 1.52 or 1.53 | 1 | | | | CEC.112 COSS | | |
| | | | | | GROUP 3600 | | |
| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | | | | | |
| Firm Sean V. O'Connell, Esquire | | | | | | | |

CERTIFICATE OF TRANSMISSION/MAILING

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| | | _ | |
|------------------|----------------------------|------|--------------|
| Typed or printed | Sean V. O'Connell, Esquire | | |
| Signature | Cel III | Date | May 24, 2004 |
| | | | |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

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EE TRANSMITTAL for FY 2004

Effective 01/01/2003. Patent fees are subject to annual revision

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 420.00

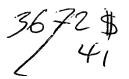
| Complete if Known | | | | |
|----------------------|------------------|--|--|--|
| Application Number | 09/481,351 | | | |
| Filing Date | January 12, 2000 | | | |
| First Named Inventor | David R. Payne | | | |
| Examiner Name | Raymond Addie | | | |
| Art Unit | 3671 | | | |
| Attorney Docket No. | 082380-00339 | | | |

| METHOD OF PAYMENT (check all that apply) | | | FEE CALCULATION (continued) | | | | | |
|--|---|------------|-----------------------------|----------------|--------------|-------------|--|---|
| ☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None | | | 3. ADDI | TIONA | L FEES | | | |
| Deposit Amount: | | | | 1 | | | | |
| Deposit | | ł | Large Entity | | Small Entity | | | |
| Account Number | 13-2493 | | Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
| Deposit | | | 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| Account Number | McKinney & Stringer, P.C. | | 1052 | 50 | 2052 | 25 | Surcharge – late provisional filing fee or cover charge | |
| The Commissioner | is authorized to: (check all that apply) | I | 1053 | 130 | 1053 | 130 | Non-English specification | |
| ☑ Charge fee(s) indicated below ☑ Credit any overpayments | | | 1812 | 2,520 | 1812 | 2,250 | For filing a request for ex parte reexamination | |
| ☑ Charge any addirect | ional fee(s) during the pendency of this application | | 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to | , |
| Charge fee(s) indicated below, except for the filing fee to the above- | | | | 020 | .50. | 020 | Examiner Action | <u> </u> |
| identified deposit | FEE CALCULATION | \dashv | 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | • |
| 1. BASIC FILII | | _ | 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| Large Entity | Small Entity | ı | 1252 | 420 | 2252 | 210 | Extension for reply within second month | 420.00 |
| Fee Fee (\$) | Fee Fee (\$) Code Fee Description Fee Paid | | 1253 | 950 | 2253 | 475 | Extension for reply within third month | , |
| • | 2001 385 Utility filing Fee | 1 I | 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth mon | th |
| | 2002 170 Design filing fee | 1 | 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| | | 1 | 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| | 2003 265 Plant filing fee | 1 | 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1004 770 | 2004 385 Reissue filing fee | 11 | 1403 | 290 | 2403 | 145 | Request for Oral Hearing | |
| 1005 160 | 2005 80 Provisional filing fee | <u> </u> | 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | 2002 |
| | SUBTOTAL (1) (\$) | | 1452 | 110 | 2452 | 55 | Petition to revive – unavoidable | 23 |
| 2. EXTRA CLA | IM FEES FOR UTILITY AND REISSUE | | 1453 | 1,330 | 2453 | 665 | Petition to revive – unintentional | 1 |
| Z. EXTRACES | Extra Fee from Fee | | 1501 1502 | 1,330 480 | 2501 2502 | 665 240 | Utility issue fee (or reissue) | |
| Extra Fee from Fee Claims below Paid | | _ | 1502 | 640 | 2502 | 320 | Design issue fee Plant issue fee | |
| Total Claims | -20** = X 18.00 = | 71 | 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| ladaaadaat Claima | -3** = X 86.00 = | 5 I | 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q |) (|
| Independent Claims | -3** = X 86.00 = | Ⅎ I | 1806 | 180 | 1806 | 180 | Submissions of Information Disclosur | · 1 · · · · · · · · · · · · · · · · · · |
| Multiple Dependent | -20** = X = | ╛┇ | 0004 | | 0004 | | Stmt | |
| Large Entity | Small Entity | | 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| Fee Fee (\$) Code | Fee Fee (\$) Code Fee Description | | 1809 | 770 | 2809 | 385 | Filing a submission after final rejectio (37 CFR 1.129(a)) | n |
| 1202 18 1201 86 | 2202 9 Claims in excess of 20 2201 43 Independent claims in excess of 3 | | 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1203 290 | 2203 145 Multiple dependent claim, if not paid | | 1801 | 770 | 2801 | 385 | Request for Continued Examination | |
| 1204 86 | 2204 43 *** Reissue independent claims over original patent | | 1802 | 900 | 1802 | 900 | (RCE) Request for expedited examination of | , |
| 1205 18 | 2205 9 ** Reissue claims in excess of 20 and over original patent | ı | Other fee | e (specify | ۸ | | a design application | |
| SUBTOTAL (2) (\$) | | | | - (openly | _ | | <u> </u> | |
| **or number previously paid, if greater, For Reissues, see above | | | *Redu | ced by E | Basic Filin | g Fee | SUBTOTAL (3) (\$) 42 | 20.00 |
| SUBMITTED BY | | | | | | | Complete (if applicable |) |
| Name (Print/Type) | Sean V. O'Connell | | | ation No | | 2,951 | Telephone: 405-239 | -6444 |
| Signature | 1 20/1/1/ | | | | | | Date May 24, 2 | 004 |

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□ DESIGN

Att'y Dkt. No.:

Group Art Unit:

Examiner:

☑ UTILITY

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

David R. Payne, Gerald A. Stangl,

Norman E. Stevens, Jr., and Michael F. Gard

Serial No.:

09/481,351

Filed:

January 12, 2000

For:

SYSTEM AND METHOD FOR

AUTOMATICALLY DRILLING

AND BACKREAMING A HORIZONTAL BORE

UNDERGROUND

RECEIVED

082380-00339

3672

R. Addie

JUN 0 8 2004

GROUP Sano

Mail Stop Non-Fee Amendment **Commissioner For Patents** P.O. Box 1450 Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE TO OFFICE ACTION **MAILED DECEMBER 3, 2003**

Applicant respectfully requests that the above application be amended as follows:

In the claims:

- 1-11. Cancelled.
- 12-20. Withdrawn.
- 21. Cancelled.
- 22. Withdrawn.
- 23. Cancelled.
- 24. Cancelled.
- 25. (Twice Amended) A horizontal drilling system comprising:
- a horizontal drilling machine having a plurality of automated functions, and

further comprising:

- a drill string, having a first end and a second end;
- a drive system operatively connectable to the first end of the drill string and adapted to advance the drill string through the earth;